

Biomedical Sciences

BSc Hons



Why study this programme?

If you enjoy science and its practical application, especially in the health-care setting, or you have an interest in medical science and human disease, this programme could be for you.

Our understanding of human disease has increased over the years, advancing from the genetic investigation of disease to more recent characterisations of prions and other infective agents. The central theme of this programme is the development of an understanding of the pathophysiology (cause and effect) of disease, of the diagnostic pathway and of therapeutic strategies.

A degree in biomedical science provides a clear career structure. The programme is accredited by the professional body, the Institute of Biomedical Science, and as such opens doors for employment in the healthcare sector. Recently, the profile and importance of biomedical science has been rising within the healthcare setting, and it has been highlighted as being central to NHS provision within the Department of Health. Career progression for a biomedical scientist is very well structured and provides opportunities to progress to consultant level. More information on the professional body and its associated career pathway is available at www.ibms.org.uk.

You should apply for this programme if you are interested in learning more about the causes, progression, diagnosis and treatment of disease; in developing practical skills for use in the laboratory setting; in a career in the

NHS or other areas related to health care; or in employment in more general areas of science, e.g. in the research and commercial sectors, including universities.

The programme is designed to enable you to develop a range of skills to help you prepare either for employment or for further study. Our programme combines practical training with the application of theoretical knowledge, and has strong links with local industries and NHS institutions.

Why study with us?

The School of Science unites science with teaching and research. It works with the university's Natural Resources Institute to provide a centre for higher education with international expertise that spans the social, physical and natural sciences.

The School employs the very latest learning and assessment techniques, provide pastoral care to ensure students achieve their goals and deliver academic and professional programmes supported by research and scholarship. We have some of the most sophisticated instrumentation and most modern facilities in the UK, including a £1.5 million chemistry laboratory. Most of our programmes are accredited or recognised by relevant professional bodies, so you can have total confidence in the quality of our teaching programmes.

The School is located on the Medway Campus in the rapidly developing area of Chatham Maritime in Kent. The campus is home to three universities, making it a vibrant place to work, study

and relax. There are three cafés, a pub, a sports hall and five halls of residence. The Students' Union University of Greenwich (www.suug.co.uk) and the Universities at Medway Students' Association (www.umsa.org.uk) both organise a variety of sports and social activities. The Medway Campus is located near the historic towns of Rochester and Chatham and is 50 minutes away from central London.

What courses will you study?

Biomedical science is a dynamic and rapidly changing area within the healthcare sector. The programme reflects this in its approach, drawing upon research leaders in the areas of immunology, biochemistry and cancer biology, among others. You will be able to explore a wide range of disease topics, including cancer, immunology, infectious disease, and haematological and metabolic disorders. Pathophysiology of disease and biochemistry both underpin the degree, with core courses running throughout the programme.

Year 1

- Fundamental Biology and Physiology (30 credits)
- Fundamentals of Biochemistry (30 credits)
- Basic Chemistry for Life Sciences (15 credits)
- Practical and Professional Skills (30 credits)
- Introduction to Medical Science (15 credits)

The first year of study is intended to be a foundation for the more advanced studies in subsequent years. Approximately one quarter of the programme is taken up with practical-based courses which aim to build skills in this area.

Year 2

- Research and Professional Skills (15 credits)
- Pharmacology (15 credits)
- Immunology (15 credits)
- Pathobiology (15 credits)
- Physiological Systems and Regulations (15 credits)
- Professional Practice in Biomedical Science (15 credits)
- Bioanalytical Techniques (15 credits)
- Metabolism and Disease (15 credits)

The second year begins to take skills and theoretical development to more advanced levels, developing your research ability and critical thinking in preparation for the final year.

Optional Sandwich Year (Work Placement)

Sandwich placements provide a tremendous opportunity to gain valuable work experience, enhance your CV and improve your employment prospects upon graduation. Successful completion of at least 36 weeks of sandwich employment will result in the award of a Diploma of Industrial Study. We encourage all students to consider taking up this opportunity.



Key facts

UCAS code: B940 B BSc/BmdS
(Bromley College)
B940 M BSc/BmdS (Medway Campus)

Attendance: 3 years full-time, 4 years sandwich, 4 years part-time.

The programme can be taken in its entirety at the University of Greenwich or by studying at Bromley College for years 1 and 2, transferring to the university's Medway Campus for the final year.

Entry requirements:

To find out more about entry requirements, please visit www.gre.ac.uk/programmes and type your programme into the search engine; then click on the 'Key Facts' tab on the programme page.

How to apply:

- Full-time applications must be made through UCAS. You should carefully consider the programmes available and apply as early as possible. For further information and UCAS deadlines, please visit www.ucas.ac.uk.
- If you are applying from outside the United Kingdom and Republic of Ireland, you should apply online at www.gre.ac.uk/apply. For further information, e-mail international@gre.ac.uk.
- Part-time students apply online at www.gre.ac.uk/apply.

Through the Erasmus European exchange programme we also have collaborative arrangements with universities in the Netherlands, Italy and France which permit students to study abroad for a period of time. This can make an important addition to your experience and CV.

Final year

- Project (30 credits)
- Medical Microbiology (15 credits)
- Medical Biochemistry (15 credits)
- Advanced and Clinical Immunology (15 credits)
- Haematology and Blood Transfusion (15 credits)
- Cellular and Molecular Pathology (15 credits)
- Cancer Biology and Therapeutics (15 credits)

The content of the final year focuses on the clinical and medical aspects of disease and enables you to develop an in-depth understanding of fundamental areas in biomedical science.

In the final year, you will also carry out an independent research project that comprises one quarter of your final-year study. You will be provided with one-to-one supervision from individuals with expertise in their area of study. There are opportunities to carry out research projects within NHS laboratories during the final year.

Part-time study

The degree is also available part-time, but only for those currently working in biomedical laboratories (for example, in hospitals) who wish to develop

their career prospects and become registered biomedical scientists.

Career opportunities

Biomedical science graduates are well placed for employment in both the public and private healthcare sectors. The NHS is by far the greatest employer of biomedical scientists; however, opportunities also exist in areas outside the NHS, including the National Blood Service, Health Protection Agency and Medical Research Council. There is also the potential for employment in the veterinary service, the Health and Safety Executive, university and forensic laboratories, and the pharmaceutical industry, as well as in research, commerce, Her Majesty's Forces and various government departments.

Teaching and assessment

The programme is taught using a combination of lectures, tutorials, laboratory practicals, workshops, case studies and student-led presentations. It has a strong practical orientation combined with academic rigour. You will be assessed through a range of different strategies, including essay assignments, examinations, practical assignments in the laboratory and oral presentations. Courses are taught by lecturers who have strong experience in research, teaching and professional environments.

Financial information

For up-to-date information on tuition fees and financial help, please visit www.gre.ac.uk/finance.

Your next step

University Open Days are held several times a year. They include a programme of talks and offer you the opportunity to speak to staff and students. You may also be given a tour of the campus. A list of dates can be found at **www.gre.ac.uk/opendays**, or contact the Enquiry Unit or International Office for further information.



Why not sign up as a Greenwich VIP and create your own Greenwich webpage, personalised to

your choice of programme and interests? Becoming a Greenwich VIP is a fast route to ordering our publications, booking an Open Day and finding out more about the university. You can also take part in chat sessions with staff and students, receive text and e-mail alerts, and enter our online competitions. Sign up at **www.gre.ac.uk/study**.

For further information

To find out more about studying at the university, please contact:

Website: www.greenwich.ac.uk

UK students

Enquiry Unit

Telephone: 020 8331 9000

Fax: 020 8331 8145

E-mail: courseinfo@gre.ac.uk

International/EU students

International Office

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Fax: +44 20 8331 8625

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UNIVERSITY
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available in other
formats on request

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